

Docket No. 50184

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Mori et al.

SERIAL NO.: 08/726,613

EXAMINER: J. Chu

FILED: October 17, 1996

GROUP: 1752

FOR: DYED PHOTORESISTS AND METHODS AND ARTICLES OF
MANUFACTURE COMPRISING SAMETHE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
WASHINGTON, DC 20231

SIR:

REQUEST FOR WITHDRAWAL OF ERRONEOUS NOTICE OF ABANDONMENT

Applicants received an Advisory Action dated September 13, 2001 in response to a response Applicants filed to an Office Action dated March 15, 2001. Applicants then received a Notice of Abandonment for dated October 23, 2001. Copies of the Advisory Action and Notice of Abandonment are enclosed.

Applicants request withdrawal of the Notice of Abandonment on grounds that the Notice is improper.

In particular, the Advisory Action indicates that the Office Action of March 15, 2001 was a final rejection. That is not correct. Enclosed is a copy of the Office Action of March 15, 2001, which indicates clearly that Action was non-final.

Accordingly, Applicants' response of August 15 was proper.

In view thereof, issuance of a Notice of Withdrawal of the Notice of Abandonment is requested. The Examiner also is invited to contact the undersigned if any other information would be of interest.

Mori et al.
U.S.S.N. 08/726,613
Page 2

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Peter F. Corless', written over a horizontal line.

Peter F. Corless (Reg. 33,860)
EDWARDS & ANGELL, LLP
Dike, Bronstein, Roberts & Cushman IP Group
P.O. Box 9169
Boston, MA 02209
(617) 523-3400

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50184
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NOTED ON SYSTEM



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
007721	01/12/01	IM52/1023	50184

DIKE BRONSTEIN ROBERTS & CUSHMAN
INTELLECTUAL PROPERTY PRACTICE GROUP
EDWARDS & ANGELL
P.O. BOX 9169
BOSTON MA 02209

EXAMINER	
CHU, J	
ART UNIT	PAPER NUMBER
1752	6129

DATE MAILED:

10/29/01

NOTICE OF ABANDONMENT

This application is abandoned in view of:

- ☒ Applicant's failure to respond to the Office letter, mailed 3/15/01 + 9/13/01
- ☐ Applicant's letter of express abandonment which is in compliance with 37 C.F.R. 1.138.
- ☐ Applicant's failure to timely file the response received _____ within the period set in the Office letter.
- ☐ Applicant's failure to pay the required issue fee within the statutory period of 3 months from the mailing date of _____ of the Notice of Allowance.

- ☐ The issue fee was received on _____
- ☐ The issue fee has not been received in Allowed Files Branch as of _____

In accordance with 35 U.S.C. 151, and under the provisions of 37 C.F.R. 1.316(b), applicant(s) may petition the Commissioner to accept the delayed payment of the issue fee if the delay in payment was unavoidable. The petition must be accompanied by the issue fee, unless it has been previously submitted, in the amount specified by 37 C.F.R. 1.17(l), and a verified showing as to the causes of the delay.

If applicant(s) never received the Notice of Allowance, a petition for a new Notice of Allowance and withdrawal of the holding of abandonment may be appropriate in view of *Delgar Inc. v. Schuyler*, 172 U.S.P.Q. 513.

- ☐ Applicant's failure to timely correct the drawings and/or submit new or substitute formal drawings by _____ as required in the last Office action.
☐ The corrected and/or substitute drawings were received on _____
- ☐ The reason(s) below.

John S. Chu
JOHN S. CHU
PRIMARY EXAMINER
GROUP 1100


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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05/720,613 10/07/96 MORI

4, 80164

IM52/0315

 ROBERT L. GOLDBERG
PO BOX 556
MARLBOROUGH MA 01752

EXAMINER

CHU, J

ART UNIT

PAPER NUMBER

1782

DATE MAILED:

03/15/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Response

 EDWARDS & ANGELL, LLP
Intellectual Property Law
Date Received 3/21/01
Docketed For Slip - 6/15/01
By DMR

 EDWARDS & ANGELL, LLP
Intellectual Property Law
Date Received _____
Docketed For _____
By _____

PFC
50184
(329)

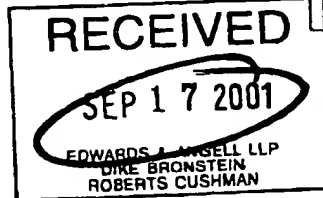


UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
US 08/000,000	10/01/00	ROBERT	50184

DIKE BRONSTEIN ROBERTS & CUSHMAN
 INTELLECTUAL PROPERTY LAW FIRM
 EDWARDS & ANGELL
 P.O. BOX 1100
 BOSTON MA 02111

EXAMINER
CHEN



ART UNIT	PAPER NUMBER
1	1

DATE MAILED: 09/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Advisory Action

Application No.

08/726,613

Applicant(s)

MORI ET AL.

Examiner

John S. Chu

Art Unit

1752

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 20 August 2001 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

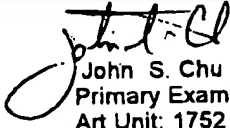
3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 79-82.Claim(s) objected to: None.Claim(s) rejected: 1,4-14,18-20,22-26 and 47-78.

Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____


John S. Chu
Primary Examiner
Art Unit: 1752

Continuation Sheet (PTO-303)
08/726,613

Applicati n No.

Continuation of 5. does NOT place the application in condition f r allowance because: The 131 declaration has not been received under separate c ver and the claims continue to be m t by the prior art of Jagannathan et al.

Office Action Summary

Application No.

08/726,613

Applicant(s)

MORI ET AL.

Examiner

John S. Chu

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-15,18-20,22-27 and 47-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-14,18-20,22-26 and 47-78 is/are rejected.
- 7) ☒ Claim(s) 15 and 17 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other:

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DETAILED ACTION

This office action is given in view of the prior art now available. An interference has not been declared in light of the prior art reference.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 4-9, 18-20, 22-26, 47-69 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by JAGANNATHAN ET AL.

The claimed invention is drawn to a photoresist composition, an article of manufacture and a method of forming a photoresist image.

Claim 1 recites a photoresist composition comprising a polymer binder, a photoactive component and a dye compound that contains anthracene groups, said dye being a polymer wherein the polymer has a weight average molecular weight of at least about 5,000.

Claim 16 recites a composition similar to claim 1 used in a method of forming a photoresist relief image, wherein the composition is coated on a substrate exposed and developed.

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Claim 10 recites photoresist composition comprising a resin binder, a photoactive component, and a polymer dye that contains one or more polycyclic chromophores, said chromophores being selected from the group consisting of phenanthryl, acridine, quinolinyl and ring substituted quinolinyl.

Claim 70 recites a composition similar to claim 1 used in a method of forming a photoresist relief image, wherein the composition is coated on a substrate exposed and developed.

Claim 20 recites an article of manufacture comprising a substrate that is an integrated circuit substrate or a flat panel display having coated thereon a photoresist composition comprising a resin binder, a photoactive component and a polymeric dye that contains one or more polycyclic chromophores, said dye compound being a polymer wherein the polymer has a weight average molecular weight of at least about 5,000.

Claim 22 recites a photoresist composition comprising a resin binder, a photoacid generator compound and a polymeric dye that contains one or more polycyclic chromophores, said dye compound being a polymer wherein the polymer has a weight average molecular weight of at least about 5,000.

Claim 50 recites a method using the compositions as recited in claims 20 and 22.

Claim 18 recites an article of manufacture comprising a polymer binder, a photoactive component and a dye that contains anthracene groups, said dye compound being a polymer wherein the polymer has a weight average molecular weight of at least about 5,000.

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JAGANNATHAN ET AL discloses a polymer-bound sensitizer, which anticipates the claimed invention in column 5, Examples 4-8. The compositions in JAGANNATHAN ET AL recite the use of anthracene as one of several chromophores for the polymer-bound sensitizer, see column 3, lines 25-37 for the additional sensitizers suitable for the composition.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-14, 18-20, 22-26, and 47-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over JAGANNATHAN ET AL

The claimed invention has been recited above and is included by reference.

JAGANNATHAN ET AL has been discussed for the disclosure of the photoresist composition having a polymer-bound sensitizer, which anticipates the claimed invention.

JAGANNATHAN ET AL lacks the explicit disclosure for the use of phenanthryl as recited in claims 10 and 70, however the use of isomeric compounds as alternative choices is conventional to the art, such that it is *prima facie* obvious to the skilled artisan to use isomers of anthracenyl, such as phenanthryl and reasonably expect the same or similar results for deep UV absorption in a photoresist composition.

Motivation is based on the desire to have a photoresist composition, which is sensitive to the deep UV part of the spectrum without the sublimation of the sensitizer.

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5. Claims 15 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the prior art references disclose the specified chromophore as recited in claims 15 and 17.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Chu whose telephone number is (703) 308-2298. The examiner can normally be reached on M-F from 9:30 am to 6:00 pm.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


John S. Chu
Primary Examiner, Group 1700

J.Chu
March 6, 2001

Notice of References Cited				Application/Control No. 08/726,613		Applicant(s)/Patent Under Reexamination MORI ET AL.			
				Examiner John S. Chu		Art Unit 1752	Page 1 of 1		
				U.S. PATENT DOCUMENTS					
*		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **		
							APS	OTHER	
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FOREIGN PATENT DOCUMENTS									
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NON-PATENT DOCUMENTS									
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*A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)
 **APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office
 PTO-892 (Rev. 03-98)

Notice of References Cited

Part of Paper No.

EDWARDS & ANGELL, LLP

COUNSELLORS AT LAW

since 1894

101 FEDERAL STREET
BOSTON, MA 02110-1800
(617) 439-4444
FAX (617) 439-4170Deanna M. Rivernider
Direct Dial: (508) 485-7772
E-Mail: drivernider@ealaw.com**FACSIMILE TRANSMITTAL COVER SHEET**

DATE: November 5, 2001

SEND TO: Examiner John Chu

LOCATION: U.S. Patent and Trademark Office
Group Art Unit: 1752

FAX NO.: 703-305-3599

FROM: Deanna Rivernider for Peter Corless

TEL. NO.: (508) 485-7772

FAX NO.: (508) 485-0363

FAX RECEIVED
NOV 05 2001
GROUP 1700
Original

MESSAGE: Re: U.S.S.N. 08/726,613, filed October 17, 1996

Dear Examiner Chu:

To follow please find a Request for Withdrawal of Erroneous Notice of Abandonment. Please call Peter F. Corless if you should have any questions. His direct telephone number is (617) 517-5557.

Respectfully submitted,

Deanna M. Rivernider
Legal Assistant to Peter F. CorlessTOTAL NUMBER OF PAGES: 14 including cover sheet.

Should there be any problem with the transmission of the following document, please contact me at (508) 485-7772.

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